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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/668,550	09/23/2003	Prashant R. Chandra	P16883	2918
28062	7590	08/29/2006	EXAMINER	
BUCKLEY, MASCHOFF, TALWALKAR LLC 5 ELM STREET NEW CANAAN, CT 06840			MARTINEZ, DAVID E	
			ART UNIT	PAPER NUMBER
			2181	

DATE MAILED: 08/29/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/668,550	Applicant(s) CHANDRA ET AL.	
	Examiner David E. Martinez	Art Unit 2181	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 July 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 22-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 22-31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.


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 SUPERVISORY PATENT EXAMINER
 TECHNOLOGY CENTER 2100

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

Election/Restrictions

Applicant's election without traverse of Species 3 in the reply filed on 7/31/06 is acknowledged.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 22-31 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 22 recites the limitation "buffer pool cache" in line 5. There is insufficient antecedent basis for this limitation in the claim. Perhaps the Applicant meant "buffer pool register cache"?

Claim 22 also recited the term "free buffer handles" in lines 4 and 7 which render the claim indefinite. It isn't clear if there are two instances of "free buffer handles" or if the recitation on both lines refers to the same instance of "free buffer handles".

Claims 23-31, due to their dependence from claim 22, they suffer from the same deficiencies and thus are rejected under the same rationale.

Due to the vagueness and a lack of clear definiteness in the claims, the claims have been treated on their merits as best understood by the examiner.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 22-31 are rejected under 35 U.S.C. 102(e) as being anticipated by US Patent

Application Publication No. US 20020176430 A1 to Sangha et al. (hereinafter Sangha).

With regards to claim 22, Sangha teaches an apparatus, comprising:

a communication path to exchange information packets [fig 2 transfer line elements 291, 292];

a processor to process information packets [fig 2 element 100];

a buffer pool register cache [fig 2 element 230 having elements 232,234,236 and 238] local to the processor [fig 2 element 100] to store free buffer handles for information packets if the buffer pool cache is not full [paragraph 93], wherein the buffer pool register cache [fig 2 element 230] is to store buffer handles associated with both receive and transmit operations [paragraphs 11-13, 17 and 93]; and

a non-local memory [fig 2 element 240] to store free buffer handles for information packets if the buffer pool register cache local to the processor is full [paragraph 93], wherein the non-local memory is not accessed if the buffer pool register cache local to the processor is not full [paragraphs 11-13, 17, 93].

With regards to claim 23, Sangha teaches the apparatus of claim 22, wherein the processor is associated with a network processor [fig 2 element 290].

With regards to claim 24, Sangha teaches the apparatus of claim 23, wherein the processor is a receive processor of the network processor [fig 2 element 290].

With regards to claim 25, Sangha teaches the apparatus of claim 23, wherein the processor is a transmit processor of the network processor [fig 2 element 290].

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1. With regards to claim 26, Sangha teaches the apparatus of claim 23, wherein the network processor includes:
a control plane processor [fig 2 element 290].
2. With regards to claim 27, Sangha teaches the apparatus of claim 22, wherein the communication path comprises:
an input path for receiving information packets [fig 2 transfer line element 291]; and
an output path for transmitting information packets [fig 2 transfer line element 292].
3. With regards to claim 28, Sangha teaches the apparatus of claim 22, wherein the communication path comprises a memory path for fetching and freeing buffers [fig 2 bus element 240 paragraph 46].
4. With regards to claim 29, Sangha teaches the apparatus of claim 22, wherein the communication path connects to at least one of a dynamic random access memory or a static random access memory [paragraph 47].
5. With regards to claim 30, Sangha teaches the apparatus of claim 22, wherein the buffer pool register cache is a set of next neighbor registers configured to form a next neighbor ring [paragraphs 16, 17 and 75].
6. With regards to claim 31, Sangha teaches the apparatus of claim 22, further comprising:
a communication interface device [fig 2 element 290] coupled to the communication path [fig 2 transfer line elements 291, 292].

Response to Arguments

Applicant's arguments filed 7/31/06 have been fully considered but they are not persuasive.

The Applicant argues Sangha fails to teach "the buffer pool register cache is to store buffer handles associated with both receive and transmit operations". The Examiner

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respectfully disagrees. The paragraphs cited above teach the claimed limitation of the buffer register cache being associated to both receive and transmit operations.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David E. Martinez whose telephone number is (571) 272-4152. The examiner can normally be reached on 8:30-5:00 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Huynh can be reached on (571) 272-4147. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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8/25/2006